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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.                | CONFIRMATION NO.       |
|--|-------------|----------------------|------------------------------------|------------------------|
| 10/567,974   | 02/10/2006  | T. Howard Killilea   | 160-P-1582USWO                     | 7392                   |
| 23322  | 7590        | 09/20/2007           |                                    |                        |
| IPLM GROUP, P.A.<br>POST OFFICE BOX 18455<br>MINNEAPOLIS, MN 55418 |             |                      | EXAMINER<br>NILAND, PATRICK DENNIS |                        |
|  |             |                      | ART UNIT<br>1714                   | PAPER NUMBER           |
|  |             |                      | MAIL DATE<br>09/20/2007            | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/567,974

Applicant(s)

KILLILEA, T. HOWARD

Examiner

Patrick D. Niland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. The amendment of 6/28/07 has been entered. Claims 1-33 are pending.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No. 6166127 Tomko in view of US Pat. No. 5422392 Floyd et al..

Tomko discloses the instantly claimed invention except for the instantly claimed VOC. See the entire document. It is noted that Tomko does not disclose a reactant falling within the scope of that of the instant claim 3. However, since the claim is directed to the polyurethane of the claimed composition and the urethane contains a moiety meeting the requirements of claim 3 (e.g. a smaller portion of the urethane containing sulfonate and ethylenic groups as well as perhaps other urethane groups) and the skilled artisan could not tell how said moiety got there while looking only at the final urethane, the polyurethane of the patentee falls within the scope of the instant claim 3.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the instantly claimed VOC in preparing the product of Tomko because such VOCs will meet current regulations regarding VOC, eliminate expensive and dangerous organic solvents, and are a well known expedient in the making of aqueous urethanes as taught by Floyd et al. which would have been expected to give the benefits of low VOC to the dispersions of Tomko.

The applicant's argument "There is no teaching or suggestion in either Tomko or Floyd to

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modify or to combine their disclosures to obtain applicants' claims." is not persuasive as this is not required to make an obviousness rejection. In fact such a specific interpretation would almost necessarily require references to be anticipating to be able to make obviousness rejections. This is clearly not the case. The examiner maintains that the above rejection meets the requirements of *Graham v. Deere* and is consistent with the *KSR International Co. v. Teleflex Inc.*, 550 U.S.---, 82 USPQ2d 1385 (2007) because the above rejection sets forth the state of the art as including the use of reduced VOC content in aqueous coating compositions which are similar in compositions to those of Tomko and the motivation to do so, which is supported at columns 1-2 at least of Floyd. These benefits would clearly be seen in the composition of Tomko and no unexpected results commensurate in scope with the cited prior art and the instant claims are seen stemming from the difference in Tomko and the instant claims. The applicant's arguments have been fully considered but are not persuasive in view of the above rejection and reasons. This rejection is therefore maintained.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

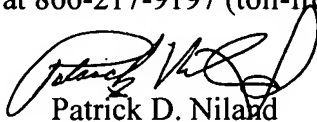
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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Patrick D. Niland  
Primary Examiner  
Art Unit 1714